

<110> Prashar, Yatinendra
Weissman, Sherman M.
Gene Logic, Inc.

<120> A Process to Study Changes in Gene Expression in T
Lymphocytes

<130> 44921-5004-WO

<140> PCT/US99/09761
<141> 1999-05-05

<150> US 60/084,329
<151> 1998-05-05

<160> 44

<170> PatentIn Ver. 2.1

<210> 1
<211> 238
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (11) .. (231)
<223> n at positions 11, 30, 32 and 231 = a or c or g or
t.

<220>
<223> Jurkat cell cDNA

<400> 1
gatcctatgt nccccccagg cggctggcan tncccacggg aagtgtccac tgaggtccct 60
gagatggata cctctacctg acatggcctg aagatgcagg gcagaggaat tgcccatgga 120
cagtgcacgca aggacttaggc tgggagggag cgtgccaacc cctttgcct ctgggtttgg 180
ggagcggagg gccttttgc ggtgcctgc ccccaataaa ggaactggac naagagat 238

<210> 2
<211> 174
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (150)
<223> n = a or c or g or t.

<220>
<223> Jurkat cell cDNA

<400> 2
gatctcatga tggggctgtt gggaaatgg tggggttgt ttgccagctt ggagtcctat 60
taaatgaaag ccagcaactc atgttggtaa taggtctact gtgggaacag ttatccctaa 120
ccacagctca aaatcgctat catcttagn caaattaaaaa tctatgtggc agcg 174

<210> 3
<211> 175
<212> DNA
<213> Homo sapiens

<220>
<223> Jurkat cell cDNA

<400> 3
gatctggta ctggctttc gttctgtttt cttggcttcc taaatttac tgccatatg 60
attctcatgc atttgatatt tatgtttaaa agtgtttata tatgtatgtt aaaaaggaaac 120
catatgtttt gagaatttggt aaagtggag acatgatcctt attaaaataaa gaagg 175

<210> 4
<211> 285
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (39)
<223> n = a or c or g or t.

<220>
<223> Jurkat cell cDNA

<400> 4
gatccctcat ggcccagcaa ggcccaagat aaatcctttaa ccacccaggg accctgtgag 60
cccaacaggta taatttagtcc attaatttttta gtgggacctg catatgttga aaatttaccaa 120
tactgactga catgtgatgc tgacctatga taaggttgag tatttatttag atggaaagg 180
aaatttgggg attatttatac ctccctggggc cagtttgggg aggattttt attgtattta 240
tattgaattt ttttttcaataaaagt cttattttg tggcg 285

<210> 5
<211> 182
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (33) .. (136)
<223> n at positions 33, 56, 75, 93, 105, 110, 122 and
136 = a or c or g or t.

<220>
<223> Jurkat cell cDNA

<400> 5

gatctgaaac ccaggttagg catgacattt canccccaaa ccctacctca tctgtnctga 60
 aagacgctga aactncctgg gatgtttcg ggnacaagaa tgtanattt ccctatccct 120
 gnacttggtt taatcnaatc aatgtgtgta ttagaataaaa agtcacagca tcccaaaaagc 180
 cg 182

<210> 6
 <211> 130
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (62) .. (80)
 <223> n = a or c or g or t.

<220>
 <223> Jurkat cell cDNA

<400> 6
 caggatctta aaaatcccg ccatctaaat atgtttccca actccattaa gtaaggtaaa 60
 ataatatttt tatttatgtt cagatgttga agctgtcatt ctcgaataaaa actacacttt 120
 agaaatggcg 130

<210> 7
 <211> 361
 <212> DNA
 <213> Homo sapiens

<220>
 <223> Jurkat cell cDNA

<400> 7
 gatctttcga ggccagggtgc ccaggtcttt catcaagagc cccatttcca agtgctcagt 60
 anccccctttt ggccagtgcn ccccccaccac atgggacaag cgccagggtcca gtggcctccc 120
 cagctgaccg caggcaggga acaaggcaga ccctagaggg ccaggccaca gcaggggctg 180
 agatgcctg gtgaatggat gcctgggaga atggatgcca gaattcacgc atgaggctct 240
 gaacagggct gggaaaactt ccaaacgaag ggaagctcat gtcttggtgc actttgtgat 300
 gatgcttcaa cagcaggact gagatgggaa catttacaat aaacagaaaat gtatgggctc 360
 g 361

<210> 8
 <211> 176
 <212> DNA
 <213> Homo sapiens

<220>
 <223> Jurkat cell cDNA

<400> 8
 gatatcttgcg cgtatctgtt ttccctcccc atgaactaga aaaccactta ctcccagaat 60
 tcaaggctgtg cttgttagta ctatatcacc aagtccattc attaatgtat ccaaaaactgt 120
 aatgttgcac tgtattccaa ataaaggta aaaacagaac caaagttata actccg 176

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<210> 9
<211> 128
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (57)..(58)
<223> n = a or c or g or t.

<220>
<223> Jurkat cell cDNA

<400> 9
gatcaattct atgtctgact ttgaaattcc atttacaatg tagtatgttt tcaatgnnaa 60
accataaaagt aacatccaag tggatcatgg tttgtggga aggttaatttt aaaataaaac 120
aatttccg 128

<210> 10
<211> 138
<212> DNA
<213> Homo sapiens

<220>
<223> Jurkat cell cDNA

<400> 10
gatcaagtca ctgcatgtt agaagtatacg gtataacttg tgaccatatc acagctcctt 60
tatttatgtt gtttcttcac attttatgtt tacaatcaag catgcctgct gaccaaggcc 120
agaggtggag tggaagcgt 138

<210> 11
<211> 271
<212> DNA
<213> Homo sapiens

<220>
<223> Jurkat cell cDNA

<400> 11
gatctcaaca ttgttggttt ctttgtttt tcatttgta caactttctt gaatttagaa 60
attacatctt tgcagttctg ttaggtgctc tgtaattaac ctgacttata tgtgaacaat 120
tttcatgaga cagtcatttt taactaatga agtgattctt ttcactact atctgtattt 180
tggaatgcac aaaattgtgt agtgctgaa tgctgttaagg agtttaggtt gtatgaattc 240
tacaacccta taataaattt tactctatac g 271

<210> 12
<211> 186
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
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<222> (20)..(115)
<223> n = a or c or g or t.

<220>
<223> Jurkat cell cDNA

<400> 12
gatccaaaac tatttggan atgtatgggt agggtaaatac agtaagaggt gttatttgg 60
accttgtttt ggacagtttta ccagttgcct tttatccaa agttgttgtt acctnctgtg 120
atacgatgct tcaagagaaa atgcggatata aaaaaatggt tcagaattaa acttcataatt 180
cattcg 186

<210> 13
<211> 171
<212> DNA
<213> Homo sapiens

<220>
<223> Jurkat cell cDNA

<400> 13
ggatctgacc tccacggagc cgctgtcccc gccccctgc tcccgctgt ctgtcctgtc 60
tgattcttctt aggtgtcatg ttctttttc tgtcttgc tcaactttttt taaaacttag 120
attgctttga aaacatgact caataaaagt ttcccttcaa tttaaacacc g 171

<210> 14
<211> 151
<212> DNA
<213> Homo sapiens

<220>
<223> T lymphocyte cDNA

<400> 14
agctccagaa gcgcttggac aggctggagg agacagtcca ggccaagtag agccccacag 60
ggcctccagc agggtcagcc attcacaccc atccactcac ctcccattcc cagccacgtg 120
gcagagaaaa aaatcataat aaaatggctt t 151

<210> 15
<211> 148
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (3)..(40)
<223> n at positions 3, 4, 13, 30 and 40 = a or c or g
or t.

<220>
<223> T lymphocyte cDNA

<400> 15

ttnngtacc tgnngtccaag tcttggctt cccttccan tcacttcact gtgcgctaag 60
gggtgggtg agggatgga gaggagggc tgcctaccat ggtctgggc ttgaggaaga 120
tgagttgtt gattaaata aagaattt 148

<210> 16
<211> 194
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)..(21)
<223> n at positions 4, 19 and 21 = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 16
ctantttaga tacgtccana nccaggaccg ctgagaactg ggacagtttc ctggatgag 60
tgccagcctg agcctgcatt gtgccgcccga gcccgggtg gaggaggag ccaggctcg 120
cttcaaggcg gcctctaccc tttctcagaa tggtttcctg attgtgtcaa tgtgaaagtt 180
aaataaaatt tatg 194

<210> 17
<211> 116
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (7)..(79)
<223> n at positions 7-9, 18, 21, 24, 28, 29, 31, 33,
42, 44, 46, 47, 52, 55, 58, 63, 69, 75, 78 and 79
= a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 17
cactgtnnng aacggtcntg cnangtanna ngncttctgc cnangnntct cnctncancc 60
aanaggcanc ttcntannt atcctaacaa gccttggacc aaatggaaat aacagc 116

<210> 18
<211> 212
<212> DNA
<213> Homo sapiens

<220>
<223> T lymphocyte cDNA

<400> 18
gccttattgg agagatacac acaaaggctg tccactcact tccataattt cttgatggac 60
atgttttct cactgtcctt ctgcattgacc ttggctactg ccatctcaa gtcctcctga 120

gtgacatgga ctcgccgttc tcgcagggca tacatgccag cttctgtgca cacgccttc 180
acttcaagcc cctgatgctc ctggcatgag ct 212

<210> 19
<211> 189
<212> DNA
<213> Homo sapiens

<220>
<223> T lymphocyte cDNA

<400> 19
tgcatttatg gaaggcacat tacaggtctt tgtggagaaga aacagaaaaga aatcacaaaa 60
gcaattaaga gagctcaaataatggggttt atgccagtt catacaagga tcctgcata 120
ctcaaggacc ctaaagttttaacatcaga tatcggaaat aaattctatc acgttaccac 180
taataaact 189

<210> 20
<211> 219
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (2)..(5)
<223> n = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 20
antgnagggaa aagctatgaa aggtgccggc ggatctacaa catggaaatg gctcgaaga 60
tcaacttctt gatgcgaaag aatcgggcag atccgtggca gggctgctga ggcctgtggg 120
tggacaccc agtgcgaaac cctcatccag tttctctcc atctcttttcc tttgtacaat 180
cccatttcctt attaccattc tctgcaataa actcaaattc 219

<210> 21
<211> 285
<212> DNA
<213> Homo sapiens

<220>
<223> T lymphocyte cDNA

<400> 21
agtcctccc tctgggggtc cttccctcagg gcccaccatt gaagagggtt attaagccaa 60
ccaaagttag atgtacgtt cttccacaca tttaaaacat ttgaaggacc taaattcgta 120
gcaaaattctg tggcagttt aaaaagttaa gctgctatag taagttactg ggcattctca 180
atacttgaat atgaaacata tgcacagggg aaggaaataa cattgcactt tataaacact 240
gtattgtaaatggaaaatgc aatgtcttaa ataaaactat ttaaa 285

<210> 22

<211> 195
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)..(11)
<223> n = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 22
ctantttaga tncgtccaca gccaggaccc ctgagaactg ggacagttc ctggatgag 60
tgcgcgtcgtc agcctgcattt gtgcggccga gcccgggtg gaggagggag ccaggctcg 120
cttcaggcg gcctctaccc ttctcagaa tggttcctg attgtgtcaa tgtgaaagtt 180
aaataaaatt tatgt 195

<210> 23
<211> 180
<212> DNA
<213> Homo sapiens

<220>
<223> T lymphocyte cDNA

<400> 23
tttgtgcgt ctctccattt cactgcgttgc tgcagagttt ttctgtact aagggggttg 60
aggattttgtt agacgttaga ttgcgggcac cgccaggat ttgcagcgc ttcagtgtac 120
gtgttagaga atattggaaa agcgtctgtg agcccccgtgc tgtatattgt aataaagtct 180

<210> 24
<211> 138
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)
<223> n = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 24
agntctctg agcaatttacc gggcgtgacc gtttcttagg tttgagaggg gctgtggctt 60
tttgtcagcg actatgttgg tttaggggt ggtgtggaga ttgttaatct tgtataaagc 120
aattcaataa atttttc 138

<210> 25
<211> 74
<212> DNA
<213> Homo sapiens

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<220>
<221> unsure
<222> (5)..(11)
<223> n at positions 5, 6 and 11 = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 25
cgagnngcaa ncttctgagg cgggtgtgc acaaggcttt cagggggcac attcacaagt 60
acctgttgtg tccc 74

<210> 26
<211> 119
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)..(25)
<223> n at positions 4, 8, 11, 17 and 25 = a or c or g
or t.

<220>
<223> T lymphocyte cDNA

<400> 26
tgtntccntg naagggncct tgcanaagtaa tagggcttct gcctaaggcct ctccctccaa 60
gccaataggc agcttctta actatcctaa caagccttgg accaaatgga aataaaagct 119

<210> 27
<211> 253
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)..(52)
<223> n at positions 4, 5, 15, 20, 32, 33, 37, 42, 45,
47, 50 and 52 = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 27
gtgnncagt cttgncttgn ccaccgcccc gnnacangct gntcngnatin antatgaaga 60
gctcaatgtc tggcaggtca atgcttcccg gacacggatc acttttgtct gattccagcc 120
tgcttgcaac cctgggtcc tcttgttccc tgctggcctg ccccttggga agggggcagtg 180
atgcctttga ggggaaggag gagccctctt ttctccatg ctgcacttac tcctttgct 240
aataaaagtg ttt 253

<210> 28
<211> 344

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<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (15)..(129)
<223> n at positions 15, 19, 24, 38, 40, 50, 59, 63, 68,
      69, 87 and 129 = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 28
cgagtgttagc acaancatnc gacngggcag ttcgcccantn tcatcctttn tgggaacanc 60
aanatacann ctccatttct ggagtcnnggg tcttccgaag ccaggagctt gccttccgc 120
ttagtccana ttggcagggtg gactacgagt catacacatg gcggaaactg gatcctggca 180
gtgaggagac ccagacgctg gttcgagagt actttcctg ggagggggcc ttccagcatg 240
tgggcaaagc cttcaatcag gcagaatct tcaagtgaac atctcttgcc atcacctagc 300
tgcctgcacc tgcccttcag ggagatgggg gtcattaaag gaaa 344

<210> 29
<211> 456
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (6)..(454)
<223> n at positions 6, 28, 33, 40-42, 97, 113, 170,
      202, 311, 347, 401, 409, 440, 444, 453, 454 = a or
      c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 29
agtgtntgcc cagggctctg atgtgtcnct canagcttgn nnagcctgac acagctgtct 60
tgtgagggac tgagatgcag gatttcttca cgcctcnct ttgtgacttc aanagcctct 120
ggcatcttt tctgcaaaagg cacctgaatg tgtctgcgtc cctgttagcn taatgtgagg 180
aggtggagag acagccccacc cttgtgtcca ctgtgacccc tgttcccatg ctgacctgtg 240
tttcctcccc agtcatcttt cttgttccag agaggtgggg ctggatgtct ccatctctgt 300
ctcaacttta ngtgcaactt gctgcaactt cttacttccc tactganaat aagaatctga 360
atatacattt gttttcccaa atatggca tgaaaagggtt ntggataant taataagcca 420
ttccccggat ttgggaaan caanttttac ctnnga 456

<210> 30
<211> 122
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (6)..(83)
<223> n at positions 6, 18, 20, 27, 45, 53, 77, 78, 83 =

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a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 30
cgtggngctc aagtcttnan ctgcccnaacg ggatcaaacc tttcnggcct gtnatgattc 60
tgaccatttg acttgannca cangtgaatc tttctcctgg tgactcaaataa aaaagtataa 120
tt 122

<210> 31
<211> 320
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (4)...(6)
<223> n = a or c or g or t.

<400> 31
aggnanagtc catggggctg ccaacttcag acgaacagaa gaaacaggag attctgaaga 60
agttcatgga tcaacatccg gagatggatt tttccaaggc taaattcaac tagcccctgt 120
tttttcctcc ctgaactctt ggggctgagc tgcaaccacc caactttctt tcccactctt 180
ctctgggact tgtgggcctc agggcttggg gcaggcatgg gactggccca ggcacacagg 240
tcccggggca tcaggagaaa ggctgggtct tgggaccttg tcctccccag ttggcctact 300
gttacacatt aaaacgattt 320

<210> 32
<211> 116
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (22)...(47)
<223> n at positions 22, 23, 35, 36 and 47 = a or c or
g or t.

<220>
<223> T lymphocyte cDNA

<400> 32
gtgggtccaa gtctttgttt gnnctaagat ttgttngctc tcagacngtg taaaacaaaa 60
tttattcatg ttttctgcat attaaaaaat cttattgtac caactggtaa actatt 116

<210> 33
<211> 210
<212> DNA
<213> Homo sapiens

<220>
<221> unsure

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<222> (25)..(122)
<223> n at positions 25, 33, 42, 43, 58, 61 and 122 = a
      or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 33
tgtctccagg atctcatgag ccgcnacgtg ttnagagggt cnncatcata cgggggangg 60
ntggggcaaa tcgccccctg tacctttcct ctggccctgc tgccccccaca cccaaactccg 120
angggccacg ctggggaaag cgggaagcgc tcgctccctt tccccccatta gtgctctc 180
tgcctggatc ccggcagaag ctatgaaaagg                                210

<210> 34
<211> 155
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (3)..(111)
<223> n at positions 3, 5, 8, 17, 30, 36, 39, 49, 51,
      71, 99, 104 and 111 = a or c or g or t.

<220>
<223> T lymphocyte cDNA

<400> 34
tancntgnta cactcgntaa agaagagcan gatcangcna ctatactana ngttagcatc 60
actaacgccc ncgcattgtgc atgaaacacc ttctctgcnc gccnattcca natttacact 120
gggagaggtg ccagcaactg aataaaatacc tctta                                155

<210> 35
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5' PCR primer

<400> 35
ctctcaaggaa tctaccgct                                19

<210> 36
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5' PCR primer

<400> 36
cagggttagac gacgctacgc                                20

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<210> 37
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: 5' PCR primer

<400> 37
taataccgcg ccacatagca                                20

<210> 38
<211> 55
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: cDNA
      synthesis primer, 1-base anchored oligo (dT)
      primer

<220>
<221> variation
<222> (55)
<223> v at position 55 = a or c or g.

<400> 38
acgtaatacg actcaactata gggcgaattt ggtcgacttt tttttttttt ttttv      55

<210> 39
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: cDNA
      synthesis primer, 2-base anchored oligo (dT)
      primer RP5.0

<400> 39
ctctcaagga tcttaccgct tttttttttt ttttttttat                                40

<210> 40
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: cDNA
      synthesis primer, 2-base anchored oligo (dT)
      primer RP6.0

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<400> 40	
taataccgcg ccacatagca tttttttttt ttttttttcg	40
<210> 41	
<211> 40	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: cDNA	
synthesis primer, 2-base anchored oligo (dT)	
primer RP9.2	
<400> 41	
cagggttagac gacgctacgc tttttttttt ttttttttga	40
<210> 42	
<211> 25	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Cloning	
adapter oligonucleotide A1	
<400> 42	
tagcgtccgg cgcaagcgacg gccag	25
<210> 43	
<211> 29	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Cloning	
adapter oligonucleotide A2	
<400> 43	
gatcctggcc gtcggctgtc tgtcggcgc	29
<210> 44	
<211> 40	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: PCR primer	
<220>	
<221> variation	
<222> (39)..(40)	
<223> v at position 39 = a or c or g; n at position 40 =	

a or c or g or t.

<400> 44

tgaagccgag acgtcggtcg tttttttttt ttttttttvn

40